

## **Endeavor Data Summary**

### **Cruise 6/20/2010**

Review Date 6/21/2010

#### **Summary:**

The crew completed 3 CTD casts at 3 stations (Station ID's 03, 04, 05) on 6/20/2010. Water samples were collected for analysis of TPH and VOA. The Aquatracker aromatic hydrocarbon fluorometer and TETHYS mass spectrometer show evidence of plumes at 1100 m and 340 m. There was also a drop in dissolved oxygen at these depths. Endeavor was granted access to sample inside the exclusion zone and a Sentry AUV was planned to be deployed for the night of 6/20/2010.

#### **Science Interpretation:**

At Stations 03 and 04, the CTD graphs show noticeable drops in Dissolved Oxygen levels at depths 1100m – 1150m which indicates the existence of a subsea plume. The fluorometer at these depths show an increase in fluorescence which also indicates microbial activity. This implies that there is a possibility of a subsea dispersed oil plume at these depths.